

80. (New) The system of claim 79, further comprising

a second multiplexer located on said other side of the isolation barrier and connected to receive data signals and control signals and providing a second multiplexed digital differential signal that is connected to the first isolation capacitor and the second isolation capacitor; and

a second demultiplexer located on the telephone line side of the isolation barrier and connected to receive the second multiplexed digital signal from the first isolation capacitor and the second isolation capacitor, the second demultiplexer having a data signal output and a control signal output;

whereby the first and second multiplexed digital differential signals are transmitted across the same first and second isolation capacitors so that bidirectional multiplexed communication of data and control signals across the isolation barrier is enabled.

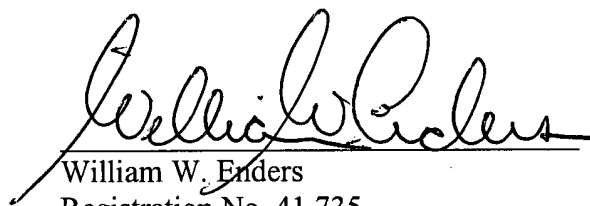
81. (New) The system of claim 79, wherein each of said plurality of isolation elements of said isolation barrier comprises a capacitor.

82. (New) The system of claim 79, wherein a portion of said plurality of isolation elements of said isolation barrier each comprises a capacitor.

REMARKS

If any additional fees under 37 CFR 1.16-1.21 be required for any reason relating to the enclosed materials, the Commissioner is authorized to deduct such fees from O'Keefe, Egan & Peterman Deposit Account No. 10-1205/SILA:002C3. The examiner is invited to contact the undersigned at the phone number indicated below with any questions or comments, or to otherwise facilitate expeditious prosecution of the application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William W. Enders", written over a horizontal line.

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APPENDIX
MARKED UP VERSION OF AMENDMENTS
AS REQUIRED BY RULE 121

In the specification:

On page 1, please insert the following paragraph above the words “Technical Field of the Invention”:

This is a continuation of U.S. Serial No. 09/591,684 filed on June 9, 2000 entitled “Isolation System With Digital Communication Across A Capacitive Barrier” which is a continuation of U. S. Serial No. 08/841,409 filed on April 22, 1997 entitled “Isolation System With Digital Communication Across A Capacitive Barrier” (now U.S. Patent No. 6,137,827).